

**METHODS OF FORMING FERROELECTRIC CAPACITORS USING SEPARATE  
POLISHING PROCESSES AND FERROELECTRIC CAPACITORS SO FORMED**

**ABSTRACT**

5           Ferroelectric memory devices can be formed by polishing an insulating layer  
on a plurality of ferroelectric capacitors with a silica slurry to reduce a height of the  
insulating layer above a surface of the plurality of ferroelectric capacitors so that the  
surface remains covered by a portion of the insulating layer. The insulating layer can  
be further polished with a ceria slurry to further reduce the height of the insulating  
10   layer and to expose a polishing stop layer on the surface of the plurality of  
ferroelectric capacitors. Related devices are also disclosed.